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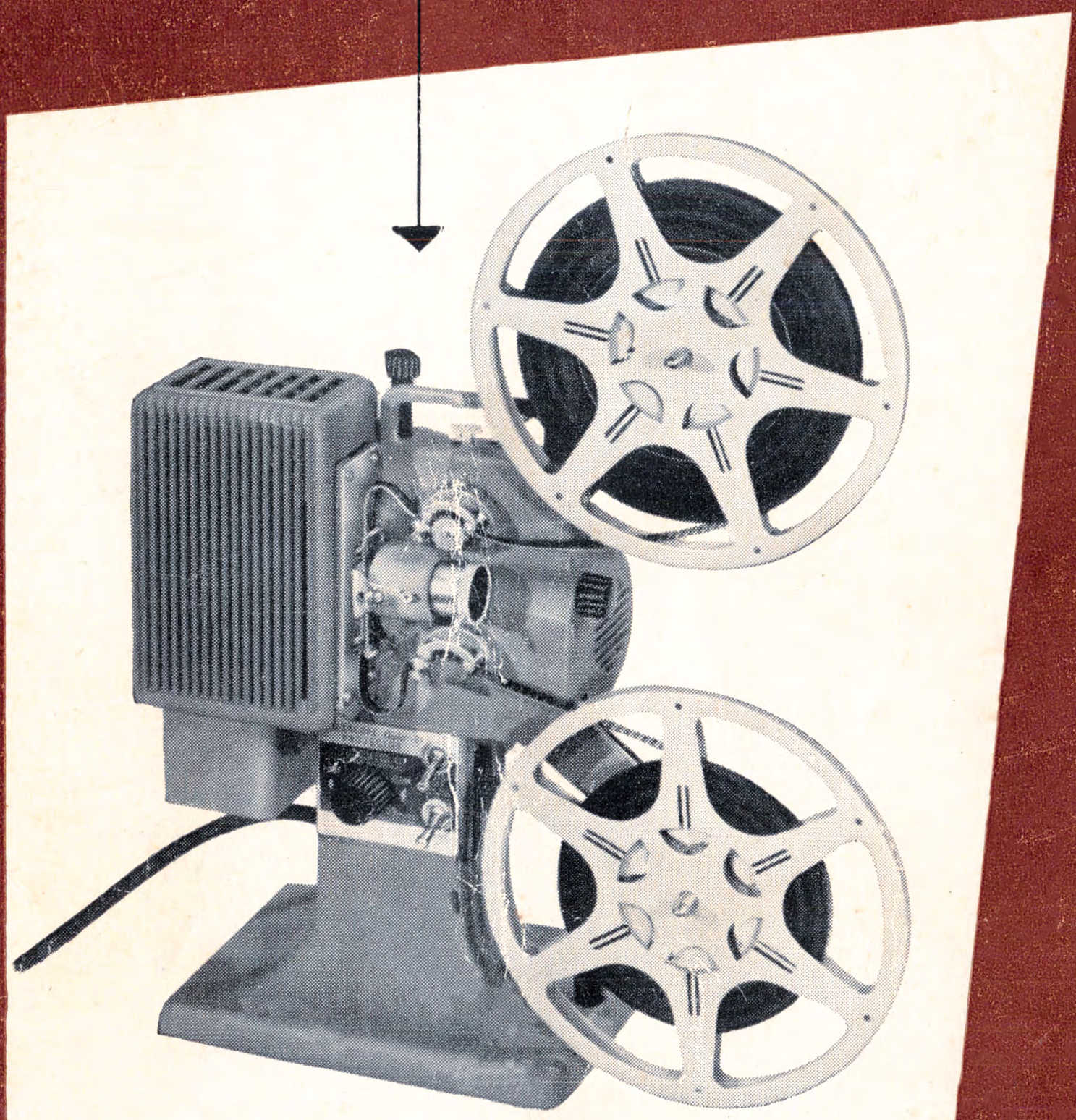
HOW TO USE THE

Kodascope Eight-71A Projector



Eastman Kodak Company · Rochester 4, N. Y.

How to operate the

This manual was prepared to assist you in the operation and care of the Kodascope Eight-71A Projector. Before operating the projector, study these directions carefully; become familiar with the few simple yet important fundamentals concerning its proper operation and care.

Supplied with each projector is a fast Kodak Projection Ektanon *f*/1.6 Lens, a powerful 750-watt lamp, a bottle of Kodak Special Lubricating Oil, and a 400-foot, 8mm Kodascope reel. The serial number of your projector can be found at the base of the name plate. Record this number for your protection.

Contents

Electrical Controls 1
Power Supply 1
Lamp and Screen Combinations 2
Preliminary Setup 3
Threading 5
Projection 6
Rewinding 7
Replacement of Projection Lamps 8
Oiling 10
Care of Film 11
Titles 12
Black-and-White Duplicating Service 12

EASTMAN KODAK COMPANY, ROCHESTER 4, N. Y.

T. M. REG. U. S. PAT. OFF.

KODASCOPE EIGHT-71A PROJECTOR

ELECTRICAL CONTROLS

Power Supply. The Kodascope Eight-71A Projector can be operated on either alternating (25- to 60-cycle) or direct current, but must not be operated on a line voltage higher than 125 volts or lower than 105 volts. If the voltage of your line is not known, inquire at your local electric service company.

Motor Switch. To start the mechanism, push up the MOTOR SWITCH.

Lamp Switch. To light the projection lamp, push up the LAMP SWITCH. Since the motor drives the fan which keeps the lamp from overheating, the circuit is arranged so that the lamp will not light unless the motor is also turned on.

Speed Control Knob. Turn the SPEED CONTROL KNOB clockwise to increase the speed of projection; counterclockwise to decrease the speed.

CAUTION: Never stop the motor by means of the speed control knob. Such procedure would stop the fan and halt the blast of air needed to cool the lamp.

LAMP WATTAGE, SCREEN WIDTH, AND SCREEN SURFACE COMBINATIONS

A 750-watt projection lamp, which provides optimum screen brightness, is supplied with the Kodascope Eight-71A Projector. However, lamps of other wattage ratings are satisfactory under certain conditions (see table below). Lamps of 300 to 1000 watts and of the proper voltage can be obtained from your Kodak dealer. For ordinary home use, do not use a lamp with a rating exceeding 750 watts ac or 500 watts dc. Sufficient ventilation, however, has been provided for the use of a 1000-watt lamp, if it is needed for projection on a large screen.

Because the line voltage may be reduced with a heavy current load, your lamp should have a voltage rating slightly lower than your line. For instance, if your line voltage is 115 to 120 volts, the 115-volt lamp will be satisfactory. To obtain the best illumination, check the line voltage.

To install the projection lamp, refer to page 8.

RECOMMENDED LAMP WATTAGES FOR VARIOUS COMBINATIONS OF SCREEN SIZE, SCREEN SURFACE, AND PROJECTION DISTANCE

Screen Width	*Projection Distance*	*Lamp Wattage*	*Type of Screen*
20 inches	10 feet	300*	Matte
22 inches	10½ feet	400*	Matte
24 inches	11½ feet	400*	Matte
26 inches	12½ feet	500*	Matte
28 inches	13½ feet	750*	Matte
30 inches	14½ feet	750*	Matte
32 inches	15½ feet	1000†	Matte
36 inches	17½ feet	1000†	Matte
30 inches	14½ feet	300*	Beaded
32 inches	15½ feet	400*	Beaded
36 inches	17½ feet	400*	Beaded
40 inches	19½ feet	500*	Beaded
44 inches	21 feet	750*	Beaded
48 inches	23 feet	1000†	Beaded
52 inches	25 feet	1000†	Beaded

*25-hour lamps †10-hour lamps

PRELIMINARY SETUP

Room Illumination. The room should be darkened sufficiently to enable the Kodascope Projector to project a brilliant image on the screen. This does not mean that the room must be totally dark. A light near the projector and not in direct line with the screen or in the eyes of the audience is desirable.

Setting up the Kodascope Projector and Screen. Follow these instructions carefully so that you can gain the maximum efficiency from your projector right from the start.

1. Place the projector on a firm stand or table.

2. Set up the screen so that its center is on a line with, or a little higher than, the projection lens of the projector.

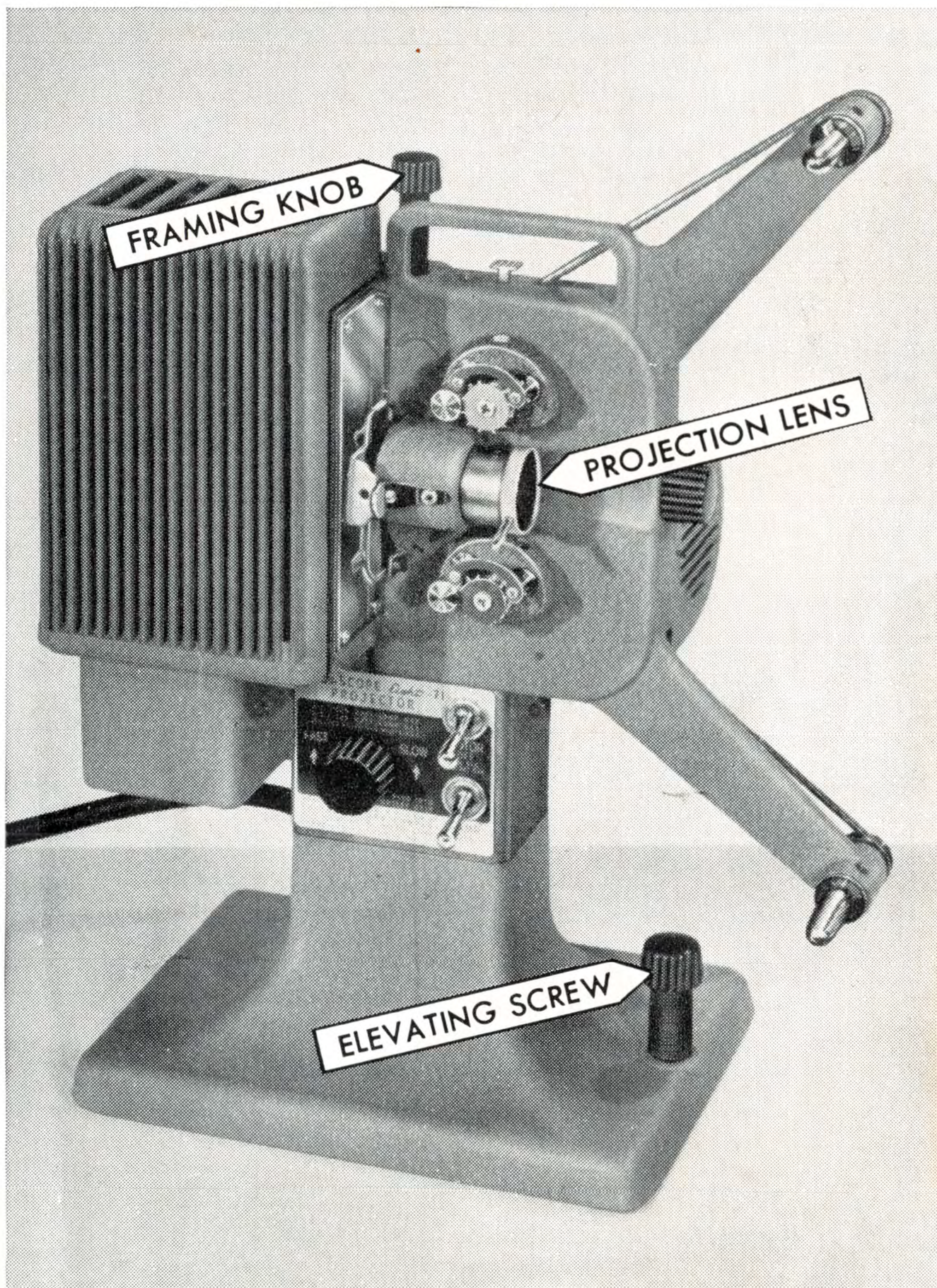
3. Connect the power cord to an electric outlet.

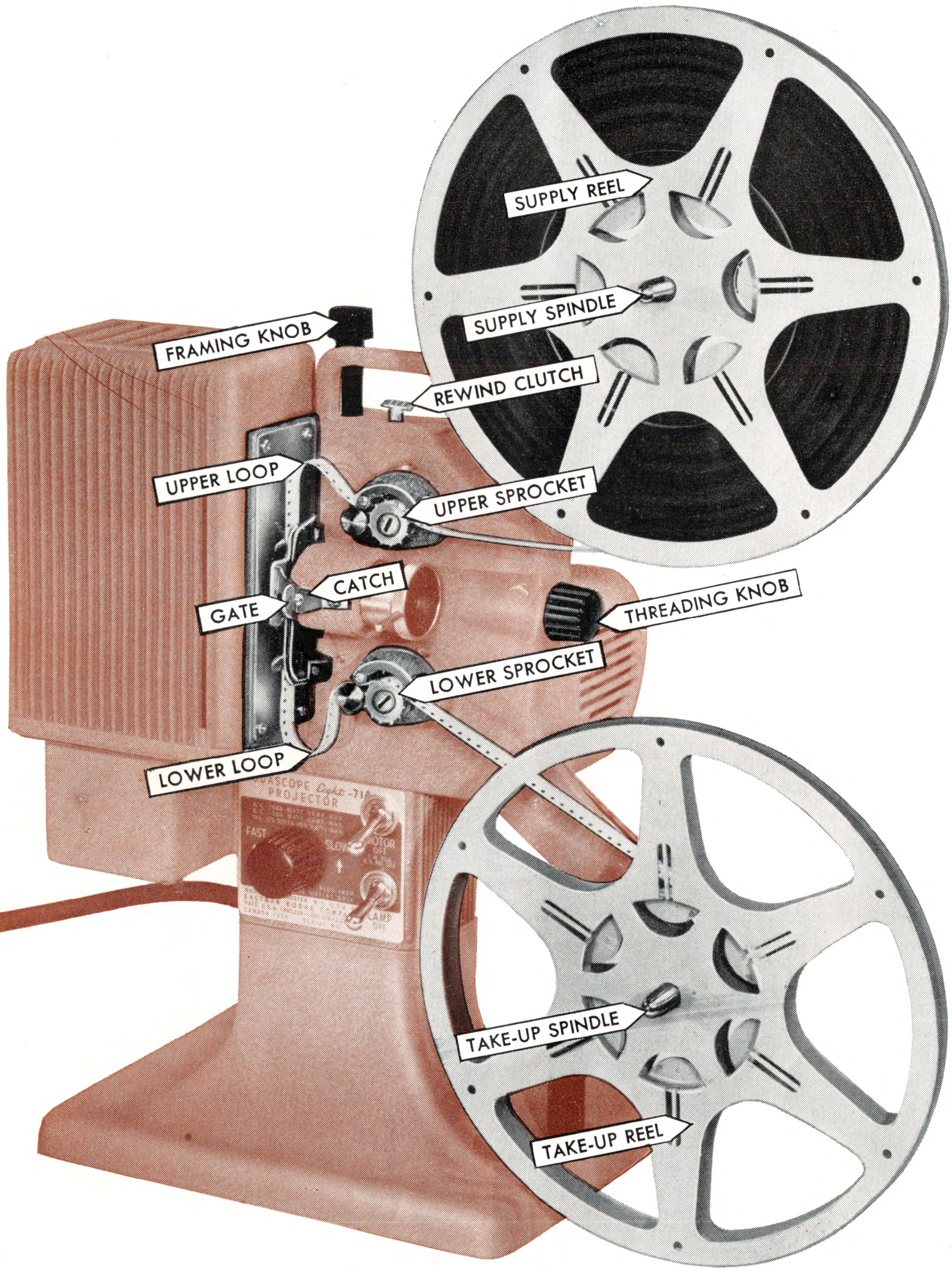
4. Start the motor; turn on the lamp and adjust the speed of the motor by turning the speed control knob until there is no flicker on the screen. This will avoid unnecessary racing of the motor and will provide an adequate flow of air for cooling the projection lamp.

5. With the motor running, move the projector to position the light on the screen. Rotate the PROJECTION LENS by means of the focusing pin until the margins of the lighted area are sharp. If the lighted area is not the right width, change the distance between the projector and the screen. The closer the projector is to the screen, the smaller the size of the lighted area.

6. Center the lighted area vertically on the screen by adjusting the ELEVATING SCREW, as illustrated.

7. Turn off the lamp and motor switches and thread the projector.




SUPPLY REEL
SUPPLY SPINDLE
FRAMING KNOB
REWIND CLUTCH
UPPER LOOP
UPPER SPROCKET
CATCH
GATE
THREADING KNOB
LOWER SPROCKET
LOWER LOOP
TAKE-UP SPINDLE
TAKE-UP REEL

THREADING

Place the reel of film on the SUPPLY SPINDLE so that the film will draw from the bottom of the reel with the perforated edge toward you. Push in the reel until the spring on the spindle snaps into position. Pull up the REWIND CLUTCH.

Unroll the full length of the film leader for threading. Make sure that the pictures on the film will enter the projector gate upside down.

Insert the film between the curved metal guide and the UPPER SPROCKET. Engage the film perforations with the sprocket teeth. Latch the GATE open by pushing it forward on the CATCH. Insert the film in the gate, making sure it is between the guides at the sides of the track. Form the UPPER LOOP to correspond in size to the guide line on the projector; then close the gate.

Form the LOWER LOOP, following its guide line on the projector; insert the film between the curved metal guide and the LOWER SPROCKET. Engage the film perforations with the sprocket teeth.

Place the empty TAKE-UP REEL on the TAKE-UP SPINDLE. Push in the reel until the spring on the spindle snaps into position. Attach the film to the take-up reel by holding the end of the film against the core of the reel and turning the reel at least one turn in a clockwise direction.

Wind up any slack film between the lower sprocket and the core of the take-up reel. Make sure that the first turn of film is wound tightly around the core and is securely attached to the take-up reel. Push down the rewind clutch.

Before turning on the motor, rotate the THREADING KNOB on the front of the projector clockwise a few times. Make sure that the pulldown claw advances the film through the gate, and that the loops are maintained and continue to match their guide lines on the projector. Always make this test following each threading of the projector, before turning on the motor switch.

PROJECTION

Start the motor and again check the loop sizes; then turn on the lamp. Rotate the projection lens with the focusing pin until the pictures on the screen are sharp. Regulate motor speed by adjusting the speed control knob until the action on the screen appears normal. If the pictures flicker, the motor is running too slowly. Increase the speed.

CAUTION: Never stop the motor with the speed control knob. Such procedure would stop the fan and halt the blast of air needed to cool the lamp.

If the edge of the next picture shows at the top or bottom of the screen, turn the FRAMING KNOB (shown on page 4). Toward the end of projection, observe the end of the film as it leaves the supply reel and turn off the lamp just before the end of the film reaches the gate. In this way, annoying glare from a blank screen will be avoided.

IMPORTANT POINTS TO REMEMBER

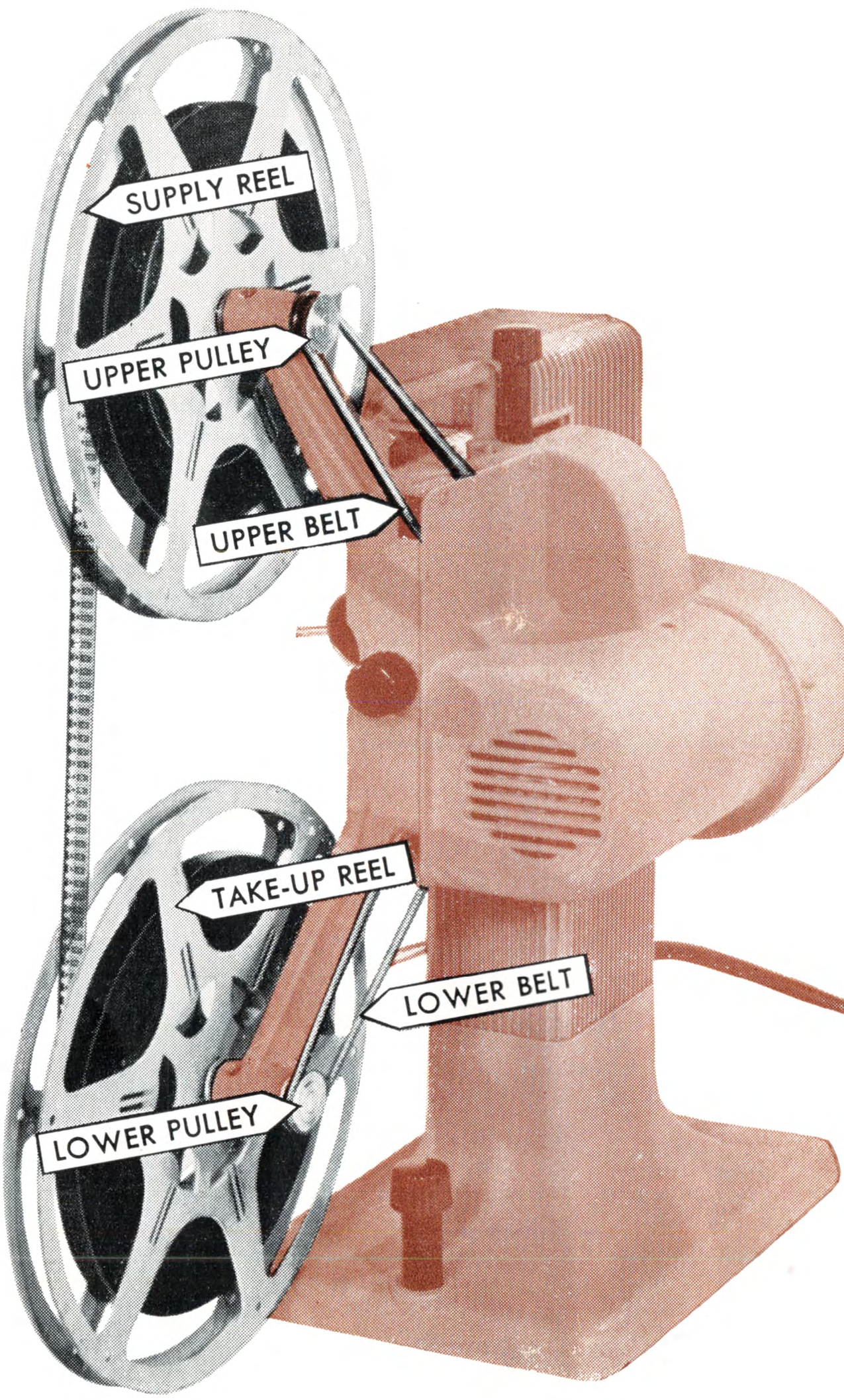
1	If the projected picture is jumpy, it may be due to loss of one of the loops. Torn film perforations often cause loop loss. Turn off the motor at once. Re-form the loops to coincide with the guide lines on the projector. Turn the threading knob and check the action of the pulldown claw. It must engage the film sprocket holes to advance the film properly.
2	If there are broken perforations, they should be noted and the section containing the broken perforations cut out, and the film spliced (see page 11).
3	If the picture on the screen is upside down and the action is backwards, the film has not been rewound.
4	If the film breaks due to loss of loop or imperfect splice, shut off the motor; splice the film; and rethread the projector.

REWINDING

The film is rewound directly from the take-up reel to the supply reel. Attach the film to the supply reel by holding the end against the core of the reel and turning the reel at least one turn counter-clockwise. Make sure that the first turn of the film is tight against the core and that there is no slack between the reels.

Raise the rewind clutch.

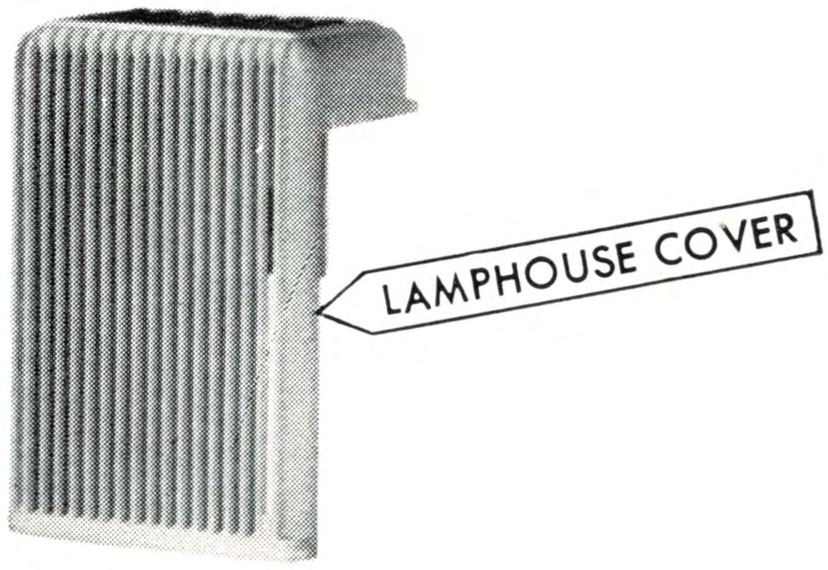
Be sure the lamp is off before starting the motor. After the film is completely rewound, shut off the motor.

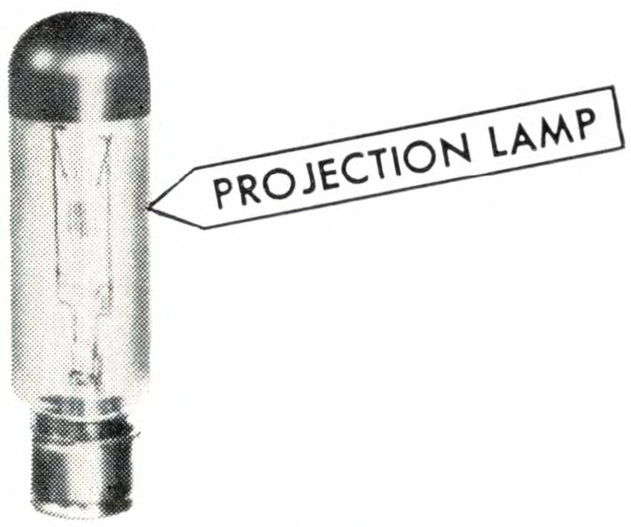


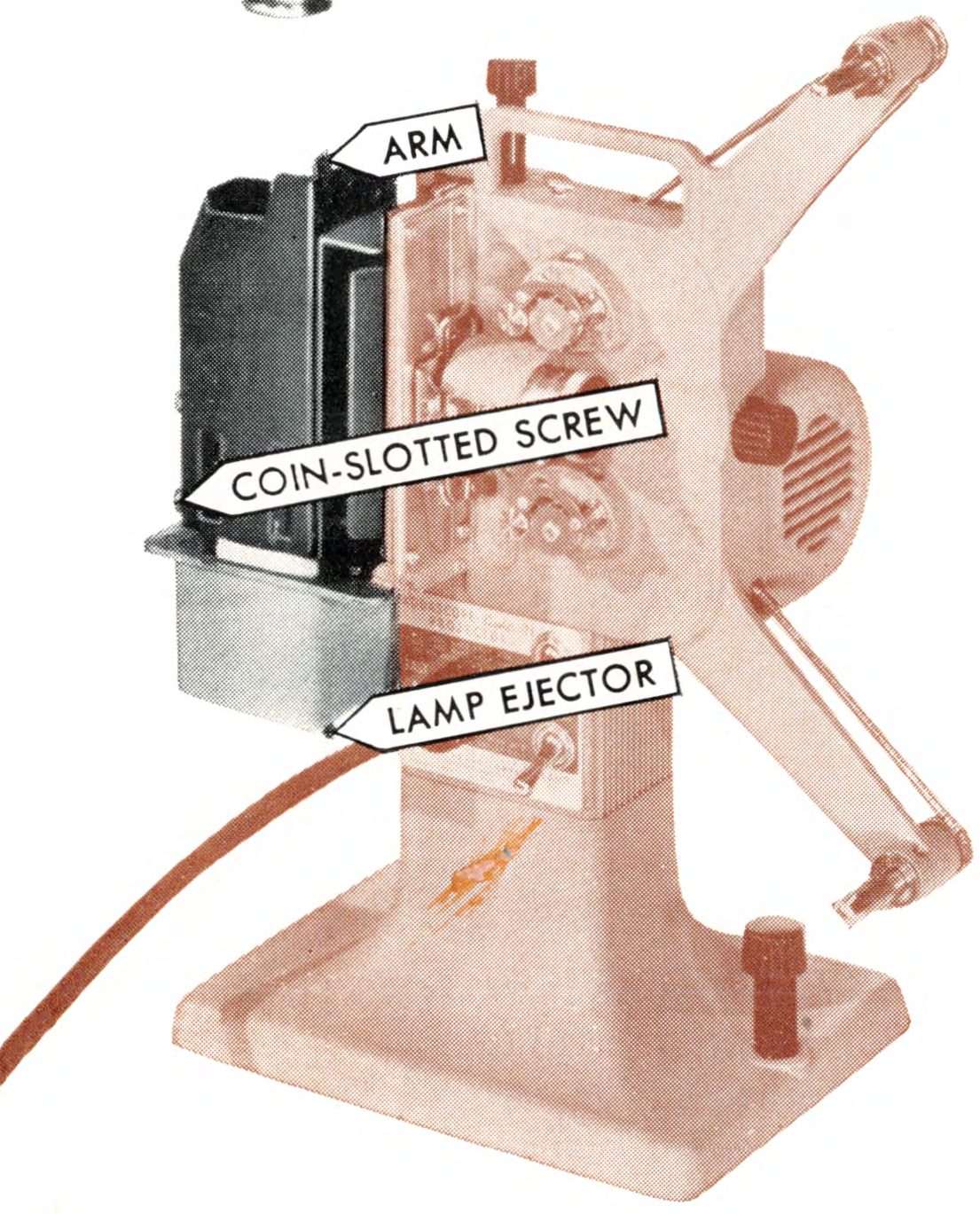
CARE OF THE KODASCOPE

a. Replacement of Projection Lamps

Replacement lamps can be obtained from your Cine-Kodak dealer. Refer to the table on page 2 to select a new lamp.







If a lamp should burn out during projection, be sure to wait until the lamp is cool before touching it. To accelerate cooling, turn on the motor switch.

To replace a projection lamp, loosen the COIN-SLOTTED SCREW on the back of the projector and lift off the LAMPHOUSE COVER.

Press down on the projection lamp and give it a quarter-turn counterclockwise. Push up the LAMP EJECTOR to force the lamp from the socket; then lift the lamp from the housing.

NOTE: The socket and lamp base are designed so that the lamp will fit into the socket only one way.

To install a lamp, insert the larger flange on the base in the larger socket opening, which is toward the front of the projector; then press the lamp down into the socket, giving it a quarter-turn clockwise to lock it.

Replace the lamphouse cover, fitting it carefully into the grooves on the projector and fasten it securely by tightening the coin-slotted screw.

b. Cleaning

(1) LENSES AND REFLECTOR

All glass-air surfaces of both the projection and condensing lenses on the projector have been Lumenized to reduce internal reflections and increase

light transmission. The tinted appearance of the lenses is due to this surface coating. Keep the projection and condensing lenses clean. Even fingerprints will reduce the brightness of the pictures on the screen and will cause them to appear cloudy or flat. Do not clean the lenses with a damp cloth. If moisture is required, breathe on the lenses or use a drop of Kodak Lens Cleaner.

Cleaning the Projection Lens. To remove the projection lens, push the focusing pin down to the vertical position; then pull the lens from the projector. With a soft, clean, lintless cloth or Kodak Lens Cleaning Paper, carefully wipe the front and back lens surfaces.

To replace the projection lens, hold it with the focusing pin horizontal and push the lens back into the projector until it snaps into position.

Cleaning the Condensing Lens. To reach the condensing lens for cleaning, first loosen the coin-slotted screw on the back of the projector; then slide off the lamphouse cover. Remove the projection lamp from its socket by pressing the lamp down and giving it a quarter-turn counterclockwise. Push up the lamp ejector, page 8, to force the lamp from the socket; then lift it from the housing. Remove the condensing lens by moving the ARM counterclockwise; then lift out the condensing lens. Carefully wipe the front and back surfaces of the condensing lens with Kodak Lens Cleaning Paper or a clean, soft cloth.

To replace the condensing lens, hold it by the arm with the smaller lens toward the projection lens and seat it properly in position. Move the arm clockwise to lock the lens in this position.

Cleaning the Reflector. Reach in the housing and clean the reflector with a soft, dry cloth.

Replace the projection lamp in the socket, with the larger flange toward the front of the projector. Push the lamp down to seat it properly in the socket; then give the lamp a quarter-turn clockwise to lock it in place.

Replace the lamphouse and tighten the coin-slotted screw.

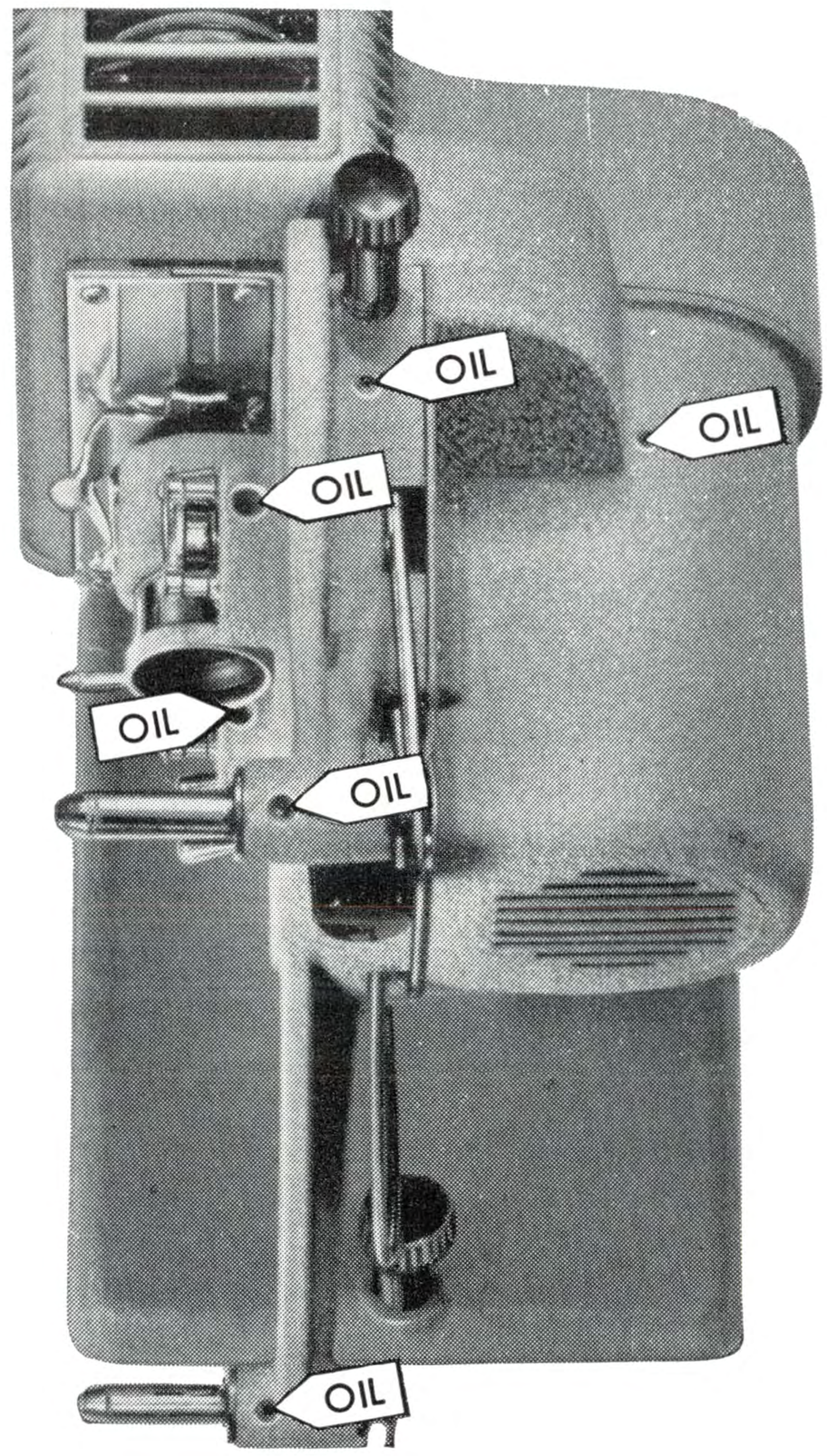
(2) GATE

The gate, which guides the film, must be cleaned occasionally because particles of emulsion adhere to the track. This deposit, if allowed to build up, will, in time, interfere with the smoothness with which the film runs through the gate. Occasional cleaning of the

gate will therefore add years of life to your films. It is also necessary to remove any foreign particles from the edges of the aperture, because they will be magnified many times when pictures are projected on the screen.

Cleaning the Gate. (1) Latch it open by pushing forward on the catch. (2) Turn the threading knob until the prongs of the pulldown claw are withdrawn behind the gate so that they will not interfere with the cleaning operations. (3) Clean the track with a damp, lintless cloth wrapped on a toothpick or match. (4) Next, give the gate an over-all cleaning by sliding a slightly moist, clean cloth up and down through the gate to remove any remaining particles of dust or dirt. Close the gate.

Cleaning the Aperture. (1) Remove the projection lens. (2) Reach through the projection lens opening with a small brush or a cloth wrapped on a stick and clean the edges of the aperture. Use care to avoid damage to the black coating on the edges of the aperture. A halo will be produced around the picture area if the aperture becomes bright. (3) Replace the projection lens.



c. *Oiling*

The projector should be oiled before it is used for the first time. A bottle of Kodak Special Lubricating Oil is supplied with each projector. The projector does not require much oil, nor does it require frequent applications. Apply the oil with the wire supplied with each bottle, one or two drops in each of the oil holes being sufficient. There are six places that should be oiled: two on the top of the pro-

jector, one above each sprocket, one for the take-up spindle, and one for the supply spindle; see illustration for oiling locations. *All other bearings are self-lubricating.*

CARE OF FILM

Handling. Great care must be exercised at all times to prevent scratches or other marks on the film because they are magnified enormously upon projection and therefore become very noticeable. Once these defects are formed, it is impossible to remove them.

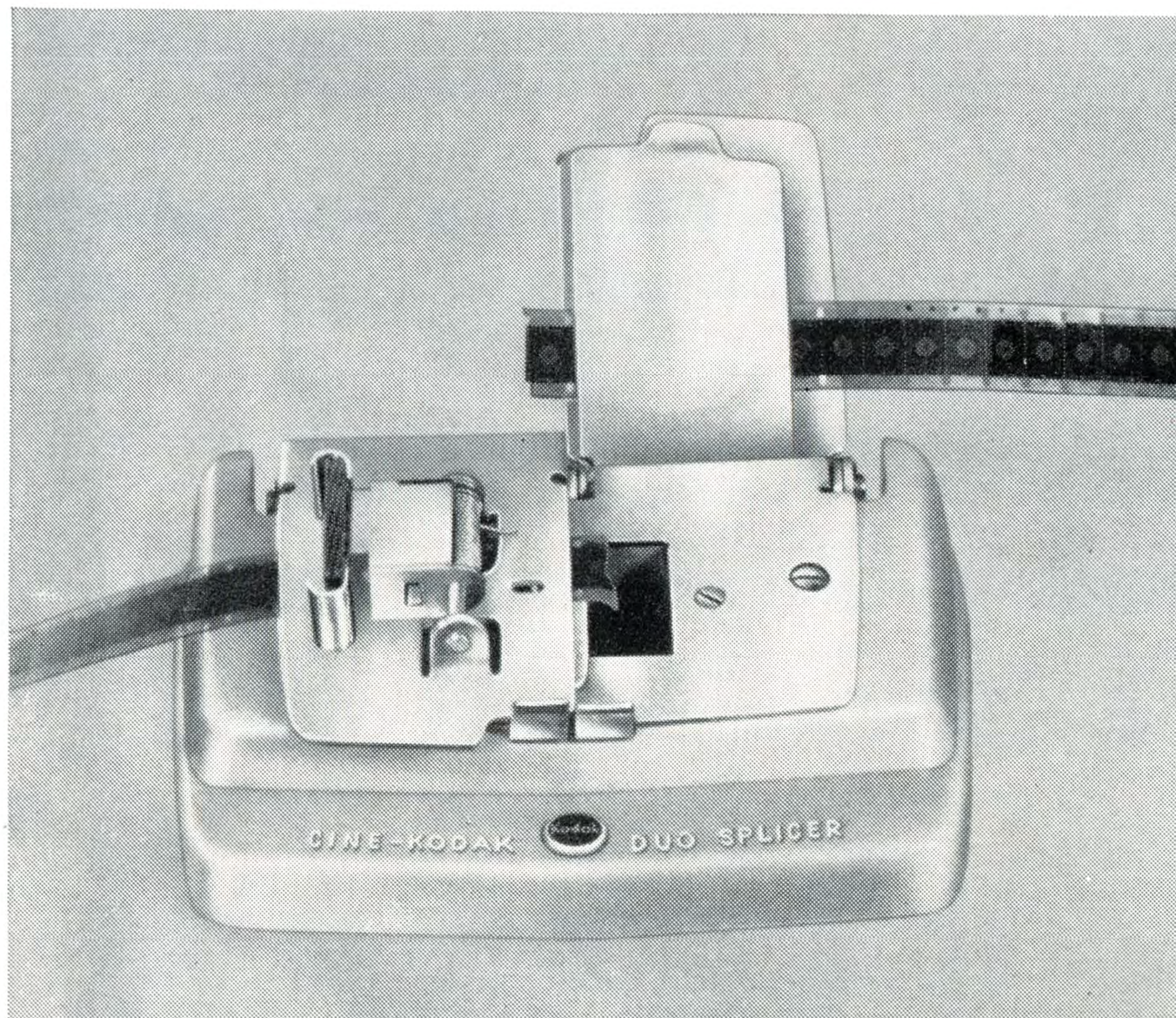
When handling the film, always hold it by the edges to avoid touching the picture area. Scratches on the film are generally caused by careless rewinding, by "cinching" it tightly on the reel, or by a dirty gate. In the event of a loosely wound reel of film, rewind the film onto another reel slowly, and then wind it with an even tension and at uniform speed back onto the first reel. *Never try to take up the slack by holding the reel in one hand and pulling the end of the film with the other, or very bad "cinch" marks will be produced.*

Cleaning. Sometimes the pictures on the screen will appear cloudy or lack brilliance. If the cause is not a dirty lens, it is probably an accumulation of dirt on the film. The best way to clean Cine-Kodak Film is to use Kodak Film Cleaner, which is prepared especially for this purpose. It should be applied with the applicator cloth supplied with the cleaner. Be sure to clean Kodachrome Film with Kodak Film Cleaner, as cleaners containing alcohol may remove the color from the film.

CAUTION: Kodak Film Cleaner is a flammable mixture. Do not use it near fire or flame. Avoid prolonged or repeated breathing of the vapor or prolonged or repeated contact with the skin. Use with adequate ventilation. Do not take internally.

Splicing. If the film should break during projection and you wish to splice it at once, proceed as follows:

Leave the upper and lower reels in position, unthread the film from the sprockets and gate, and draw out the ends of



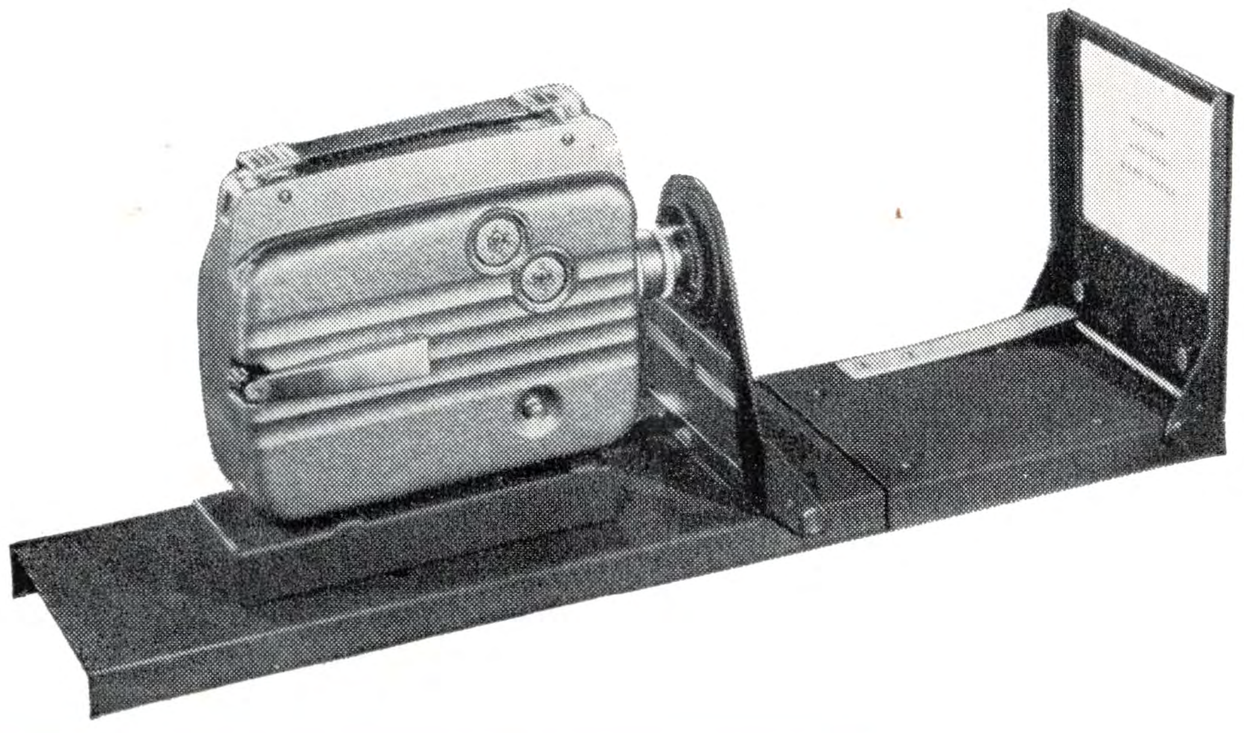
the film. Use either the Cine-Kodak Junior Splicer or the Cine-Kodak Duo Splicer, illustrated, and follow the splicing directions that are included. After the splice is made, wind up the slack film on the upper reel, taking care not to strain the splice by a sudden jerk before it is set. Rethread the projector and continue projection.

TITLES

It's fun to make titles with your own Cine-Kodak Eight Camera and the Cine-Kodak Titler. You can also use the titler in conjunction with many other hobbies. It is excellent for copying small pictures, portions of maps, stamps, etc. You can also photograph small subjects such as butterflies, bees, and other insects, sea shells, and small flowers. These close-ups will appear many times their normal size on the screen and are very effective.

The titler comes complete with blank title cards, masks, and a transparent centering guide. Be sure to get the Titler Base required to fit your particular Cine-Kodak camera to the titler. The instruction manual provided with the titler contains many tips on how to make artistic titles.

Give your movies the professional touch with well-made titles. Ask your dealer to show you the Cine-Kodak Titler.



DUPLICATING SERVICE

Black-and-white copies from either Kodachrome or black-and-white originals can be obtained from Kodak in Rochester, *through your Kodak dealer*.

DETAILS

Lens—Kodak Projection Ektanon *f*/1.6, 1-inch lens for brilliantly sharp pictures.

Illumination—The ultrafast *f*/1.6 lens, coupled with the efficient, Lumenized optical system, plus a choice of lamps from 300 to 1000 watts, produces unsurpassed screen illumination.

Centralized Control Panel—for your convenience.

Shift-Clutch Rewind—for easier operation.

Removable Lamphouse—for quick and easy access to the lamp, reflector, and condensing lens.

Reel Arms—Extra long, to hold 400-foot reels for long shows.

EASTMAN KODAK COMPANY
ROCHESTER 4, N. Y.

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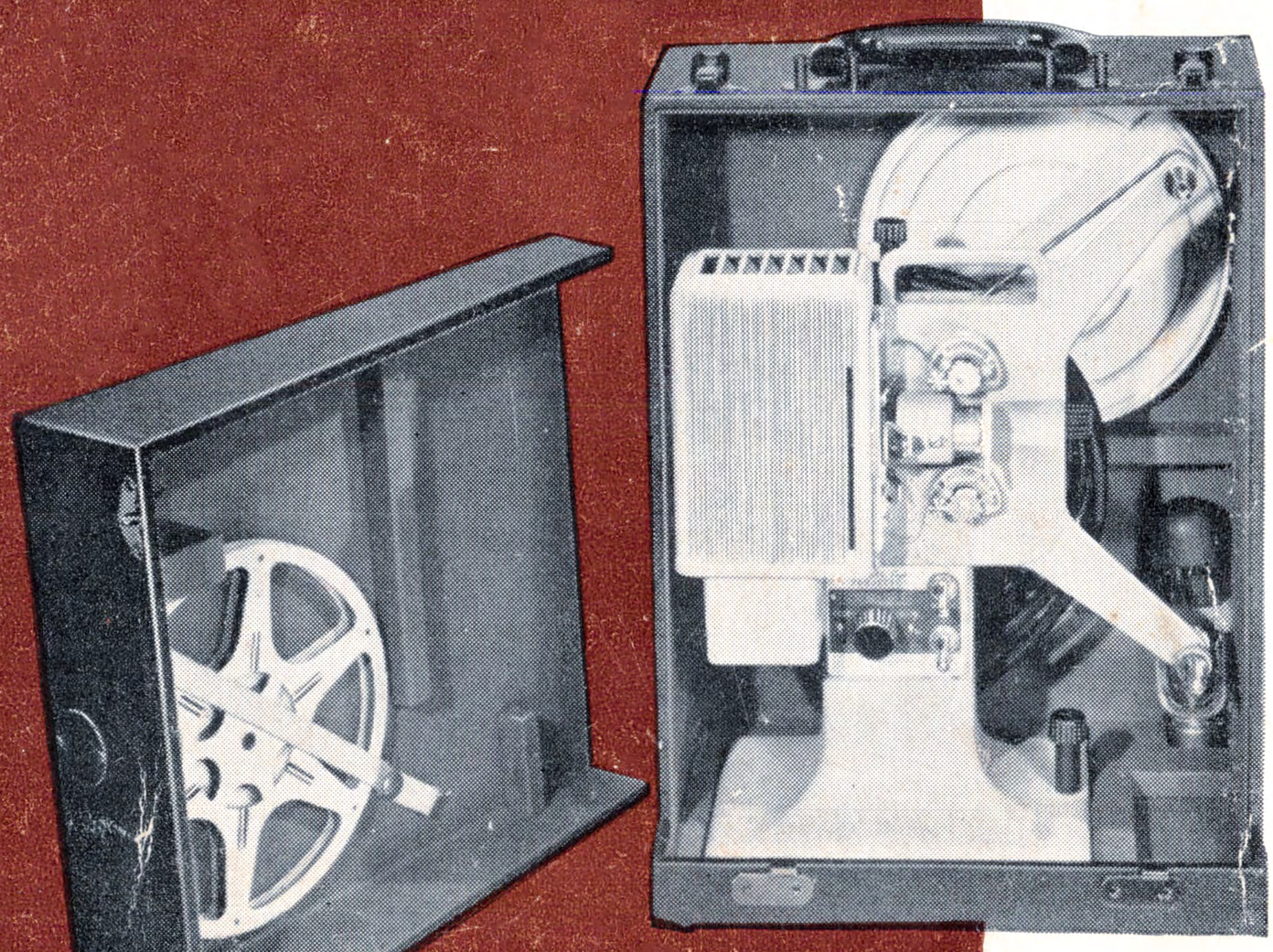
PRINTED IN THE UNITED STATES OF AMERICA

Carrying Case

FOR YOUR KODASCOPE EIGHT-71A PROJECTOR



For greater convenience in carrying the Kodascope Eight-71A Projector, we recommend the use of the carrying case, which can be obtained as an accessory.

The carrying case is made of wood, covered with Boar Grain Kodadur. It is fitted with a molded handle and two spring catches. The carrying case is designed with a front opening with separable hinges, thus making the projector more accessible.

Want the Full Story of Home Movie Fun?

"HOW TO MAKE GOOD MOVIES"

picks up the home movie story where instruction manuals leave off—guides you through every important phase of home movie making. This thoroughly readable, nontechnical book has been written to help the average home movie maker improve the interest and quality of his films. It is sold by Kodak dealers.

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